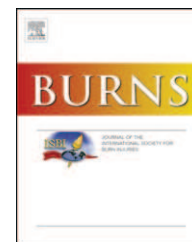


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Epidemiology of minor and moderate burns in rural Ardabil, Iran

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ABSTRACT

Epidemiology of minor burns is not well defined worldwide. The aim of this study was to examine epidemiological features of minor and moderate burn events that could be beneficial for prevention purposes. The study was conducted in Ardabil province in north-west Iran in 2005–2006. A total of 1700 minor and moderate burns were studied using a pretested questionnaire. Using the SAS 9.1 statistical program analyses were made. Females comprised the majority of cases ($n = 1000$, 58.8%) and children, aged six and younger, made up 36.4% of burn victims. The majority of burns were caused by hot water and tea with the primary containers being kettles in 37.8%, cups or glasses in 24.2%, pots in 13.6% and samovars in 7.9%. Samovars, gas stoves, valors and picnic gas stoves were the primary heating devices involved in burns. In 56% of the cases, overturning of liquid containers was the primary injury mechanism of scalds. 43% had a second-degree burn with a mean total body surface area of 1.3%. This study provides possible beneficial information for burn prevention in the Ardabil area and other similar settings.

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Burns are one of the most destructive injuries leading to long-term physical, psychological and economic sequelae other than known mortality [1,2]. In Iran, burns are the most common cause of home-related injuries with a higher incidence rate in rural areas [3]. Like other injuries, prevention of burns requires adequate knowledge of the epidemiological characteristics. While much work has been done on areas of primary and secondary prevention of burns in developed countries due to sustained research on epidemiology and risk factors, the same does not hold true of many low- and middle-income countries [4]. Much of the information published about burns in developing countries such as Iran is hospital-based and is mainly focused on data available from hospital files. Prevention-oriented community-based or hospital studies are rarely available in these countries. There

is lack of information on minor and moderate burns as well. Although many victims with minor or moderate burns do not require hospitalisation, they are still at greater risk for physical and psychological consequences that may be severe [5–7]. Therefore, epidemiology of minor burns is not well defined worldwide. Contrary to severe burns, the epidemiology of minor or even moderate burns cannot be defined based on referral burn centres. Possible seasonal variations and problems related to recall of minor burns make repeated surveys necessary in population-based studies; such measures may not gain financial support, particularly in developing countries. The national rural health network available in Iran enabled us to gain access to local primary health-care units known as health houses, which are suitable for enrolling minor and moderate burns. The aim of our study

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